CD Stereo Radio Recorder

AZ1009/00/05/17

AZ1010/00/01/04/05/10
/11/11H/14/17

Service
Service
Service

Service Manual

COMPACT disc DIGITAL AUDIO

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CLASS 1
LASER PRODUCT

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PHILIPS

TECHNICAL SPECIFICATION

General:

Mains voltage : 220V-230V / 50Hz for /00 /04 /14
230V-240V / 50Hz for /05 /10
110V-127V / 220V-240V /50Hz switchable for /01 /11 /11H
120V / 60Hz for /17

Battery : 9V (6xR20)

Power consumption : ≤ 15W at maximum output power, (≤ 11W at 1/8 P_{max})
≤ 5W (typ. 2W) with source switch in *tape/off*

Amplifier:

Power stage protection : temperature and shortcircuit

Output power mains : 2 x 1,4W_{rms} -1dB at 4Ω D=10%
battery : 2 x 2W_{rms} -1dB at 4Ω D=10%
Headphone : 3,5mm stereo jack, ≥ 20mW at 32Ω (≡ 0,8V at 32Ω) D=10%

Frequency response : 30Hz - 16kHz (typ. at volume set to -20dB, CD mode 0dB signal level ⇒use SBC429)

Tone control DBB : +12dB ±3dB at 100Hz (volume set to -20dB)

Tuner:

	FM	MW
Tuning range	87,5 - 108 MHz	522 - 1607 kHz (520 - 1730 kHz for /17)
IF	10,7 MHz ± 20 kHz	468 kHz ± 3 kHz
Sensitivity Mono: 26dB S/N, m=30%	≤ 4 µV (≤ 2µV typ.)	≤ 4mV/m (≤ 1,5mV/m typ.)
-3 dB limiting point	≤ 5 µV (≤ 2µV typ.)	
AFC capture range	±300kHz typ.	
Distortion	≤ 7% (≤ 1% typ.) RF=1mV Δf=75kHz	≤ 7% (≤ 2,5% typ.) RF=100mV/m m=80%
Image rejection ratio	≥ 20dB (26dB typ.)	≥ 28dB
Channel separation at 1kHz	≥ 20dB (25dB typ.)	

CD:

To be measured on phone socket with 100kΩ load.

Frequency response : 30 - 16.000 Hz -4dB
Signal/Noise ratio : ≥ 60dB
Distortion : 0.2% typ. at 1 kHz
Channel difference : ≤ 3dB at 1 kHz
Channel crosstalk : 40dB typ.
De emphasis : 0 or 15/50µs switched automatically by subcode on the disc

Laser
Output power : 500µW
Wave length : 780 ± 20 nm

Recorder:

To be measured on phone socket with 100kΩ load.

Tape speed : 4,76cm/s ±3%
Wow & Flutter : ≤ 0,5% weighted
Winding speed : 120s for C60 cassette
Erase / Bias system : permanent magnetic erase head / AC 65 ±5kHz
Distortion at 250 nWb/m : ≤ 7%
Signal/Noise ratio (FF weighted) : ≥ 40dB
(A - weighted) : ≥ 43dB
Channel difference at PB : ≤ 5dB
Channel difference overall : ≤ 5dB
Channel separation : ≥ 15dB at 1kHz
Track separation : ≥ 55dB at 1kHz

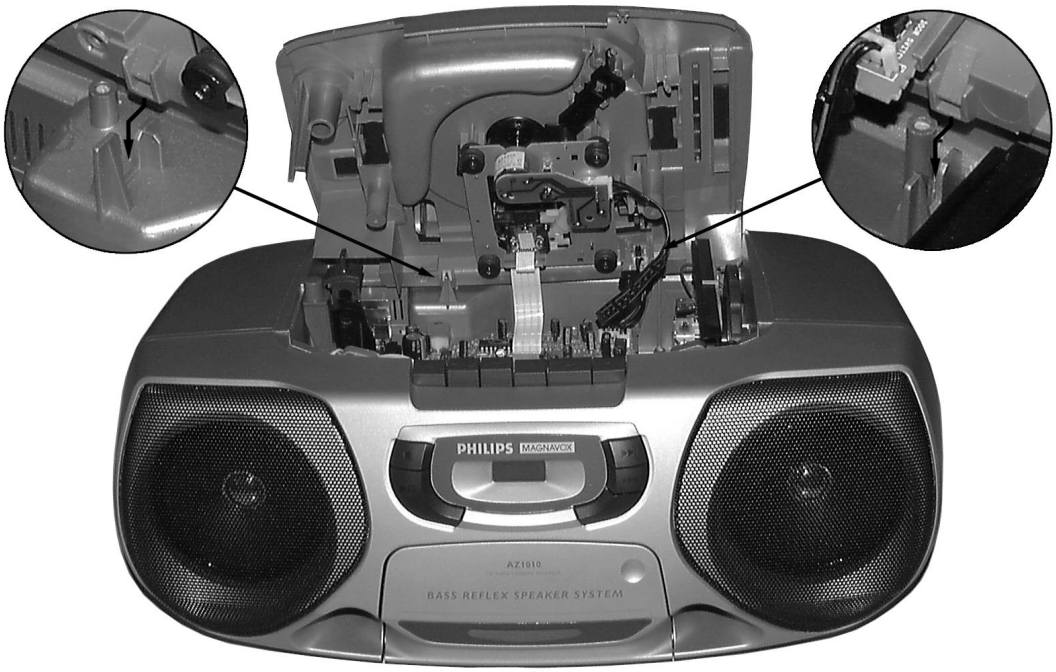
Frequency response IEC I
Pb : 125Hz - 8000Hz (within 8dB)
overall : 250Hz - 6300Hz (within 8dB)

note: set is not prepared to play or record *IEC II Chrome* cassettes!

SERVICE HINTS

General Service position

For repairs on: CD failures
Rec/Pb-amplifier
Power-amplifier
Power supply
Tuner Board

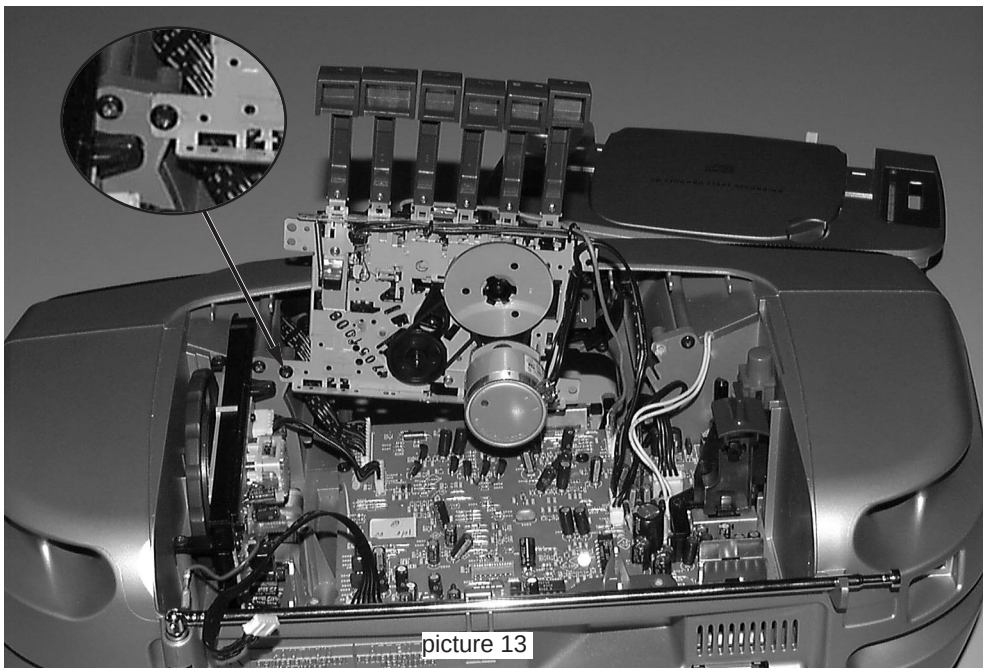


picture 12

Service position Tape Transport

For repairs on the Tape Transport or for adjustment of the tape speed:

- Dismantle tape transport as described in chapter 3-3.
- Fix tape transport on cabinet with one screw as shown in picture 13.
- Connect cables on Combi Board again.

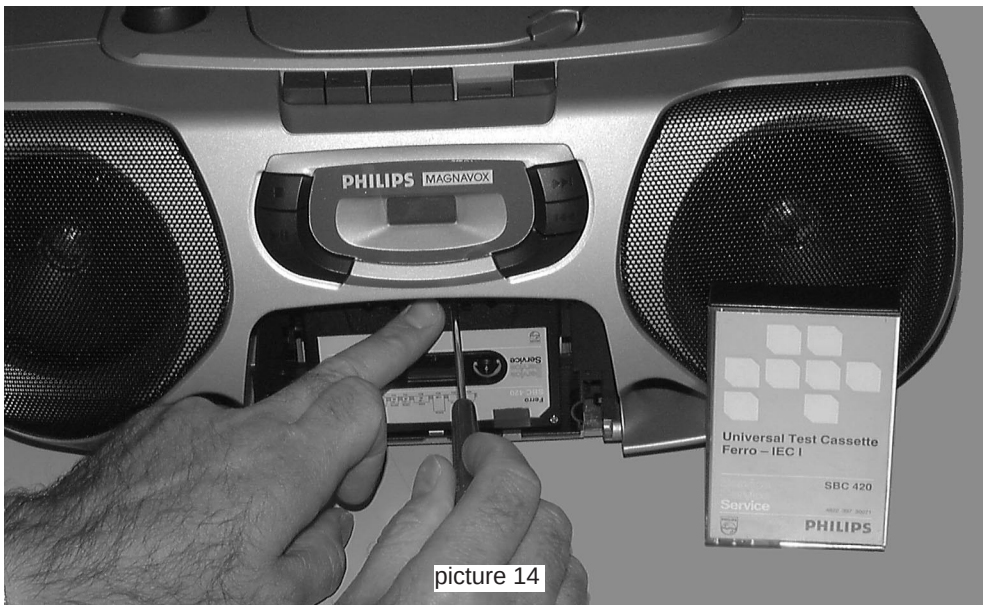


picture 13

SERVICE HINTS

Alignment of AZIMUTH

- Remove casstte door as described in chapter 3-1.
- Insert testcassette SBC420 (4822 397 30071) directly into cassette compartment and play 10kHz part.
- Adjust right hand screw for max. output and left channel = right channel.

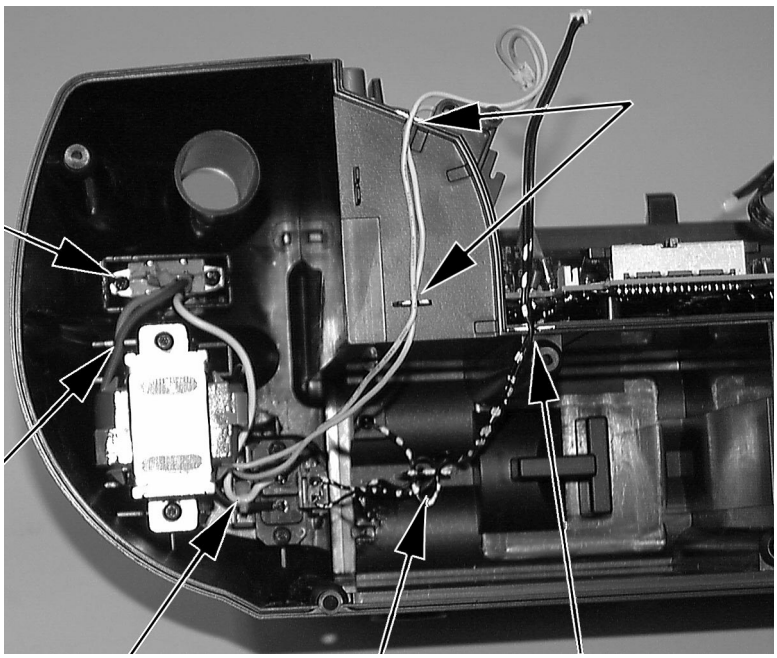


picture 14

Details wire routing of mains transformer

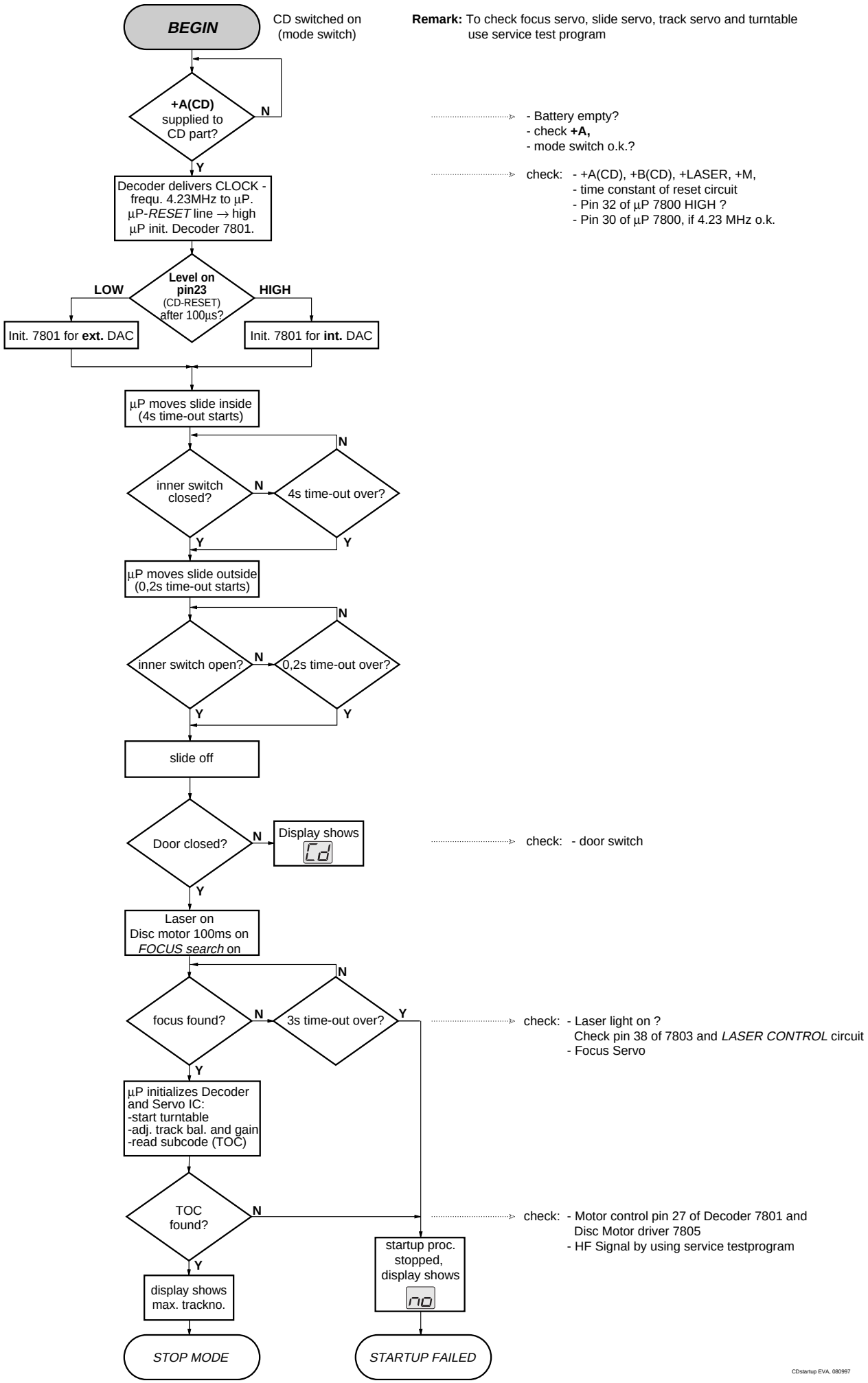
Wire routing has to be carried out as shown in picture 15 in order to:

- fulfil safety requirements and
- obtain tight speaker boxes



picture 15

CD STARTUP PROCEDURE



Pin-descriptions of CD ICs

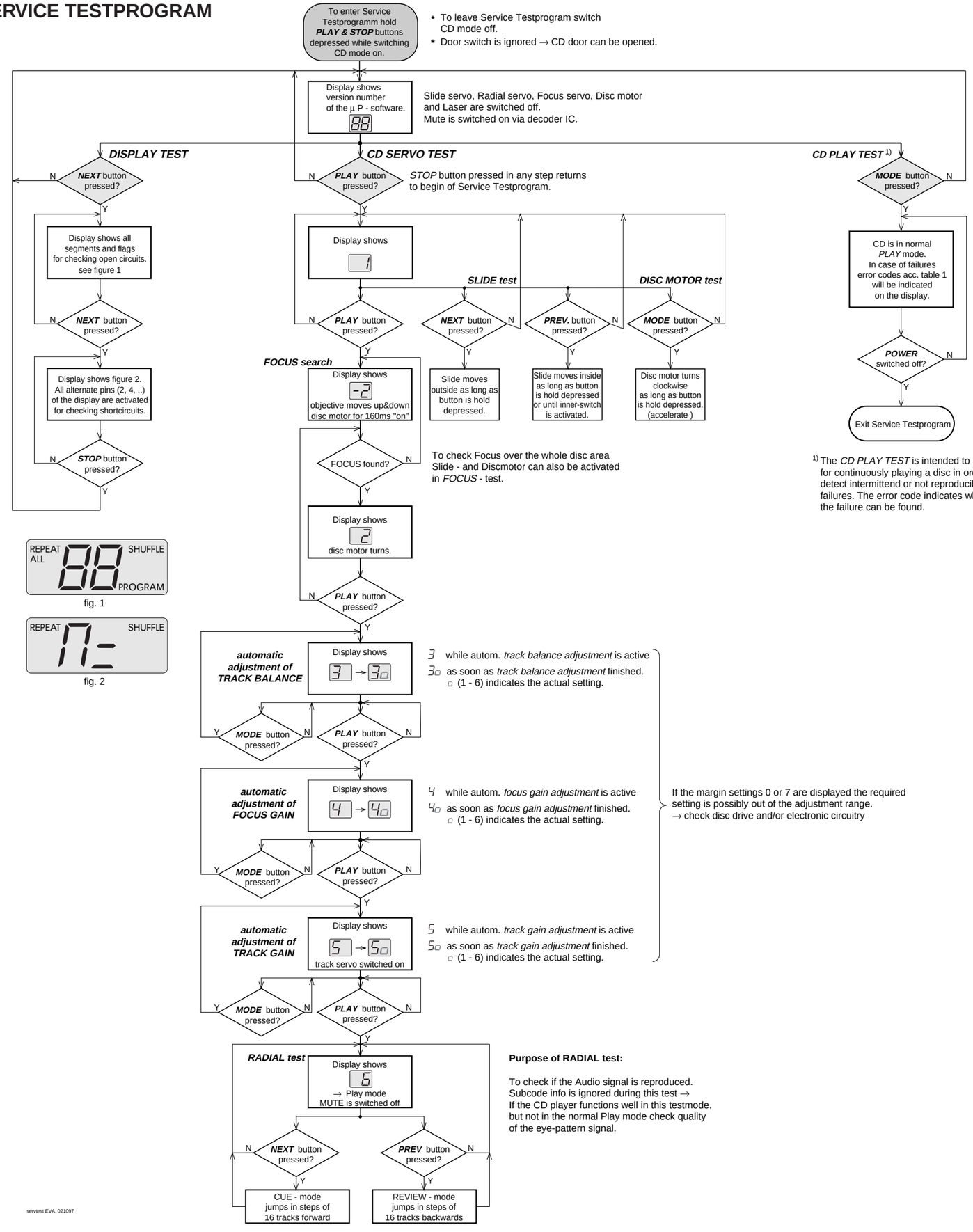
SERVO PROCESSOR M62475FP

Pin	*Name*	*Direction*	*Description*
1-3	A, B, C	Diode array → Servo processor	Current input (central photo diode signal input)
4-5	E, F	Diode array → Servo processor	Current input (satellite photo diode signal input)
6	SGT	Servo processor → Track error ampl. input	Signal generator output to track servo, sends 1700Hz for adjustment procedure
7	TE -	-	Inverting input of track error amplifier
8	TEGain	-	Gain control pin of track error amplifier
9	TG1	-	Track Gain 1 - switch: controls the gain of the track servo amplifier
10	TE out	-	Track Error amplifier output
11	TC/Shock	-	Track Cross/Shock detector input
12	TS +	-	Non inverting input of track servo amplifier
13	TG2	not connected	Track Gain 2 - switch: controls the gain of the track servo amplifier
14	TS -	-	Inverting input of track servo amplifier
15	TS out	Servo processor → Servo driver	Output of track servo amplifier
16	SS +	-	Non inverting input of slide servo amplifier
17	SS -	-	Inverting input of slide servo amplifier
18	Slide out	Servo processor → Motor driver	Output of slide servo amplifier
19	DET.FILTER	-	Pin for connection of DETection FILter capacitor of *ADJUST LOGIC*
20	BIAS	Servo processor → external electronic	Reference Voltage output Vcc/2 of internal BIAS-generator
21	GND	-	Ground connection pin (negative supply)
22	MLA/DIS	µP → Servo processor	Serial interface Microprocessor LAtch control / DIScharge control for adjustment
23	JP1/SG	µP → Servo processor	Serial interface Jump control line / Signal Generator input line for adjustment
24	MCK	µP → Servo processor	Serial interface Clock input line
25	MSD	µP → Servo processor	Serial interface Data input line
26	D_{out}	Servo processor → µP	Serial interface Data output line
27	C_{LPF}	-	Pin for connection of Low Pass Filter capacitor for *ADJUST LOGIC*
28	I_{REF}	-	Reference current input
29	V_{CC}	-	Positive supply connection pin (4V - 5.5V)
30	FS_{OUT}	Servo processor → Servo driver	Output of focus servo amplifier
31	FS -	-	Inverting input of focus servo amplifier
32	FEGain	-	Gain control pin of focus error amplifier
33	FE -	-	Inverting input of focus error amplifier
34	SGF	Servo processor → Focus error ampl. input	Signal generator output to focus servo, sends 1300Hz for adjust. procedure
35	C_{FSR}	-	Charge capacitor for Focus Search triangle-generator
36	ALPC +	-	Non inverting input of Automatic Laser Power Control amplifier
37	ALPC -	-	Inverting input of Automatic Laser Power Control amplifier
38	$ALPC_{OUT}$	Servo processor → Laser driver	Output of Automatic Laser Power Control amplifier
39	MRC	-	Connection pin for capacitor of Mirror detector
40	HF	Servo processor → Decoder	Output of HF amplifier
41	HFI	-	Inverting input of HF amplifier
42	ABC	-	Sum output of amplified A, B and C input (central photo diode signal input) to external ac-coupling capacitor

SIGNAL PROCESSOR M65824FP

Pin	*Name*	*Direction*	*Description*
1	Anal. V_{SS}	-	Analog system ground
2	ADJCLK	not connected	Clock output for servo adjustment; f=88.2kHz
3	LOCK	not connected	Lock monitor / low disc rotation output
4	CKSEL	-	System clock selection. Low=8.4672MHz, high=16.9344MHz
5	RESET	µP → Signal processor	System reset (low level = active)
6	C423	Signal processor → µP	4.2336MHz clock output
7	C846	not connected	8.4672MHz clock output
8	XI	X-Tal → Signal processor	Crystal oscillator input
9	DVSS	-	Digital system ground
10	XO	Signal processor → X-Tal	Crystal oscillator output
11	TEST	-	Normal / Test selection input. Testmode = high
12	SBCO	not connected	Subcode serial output
13	SCCK	-	Shift clock input for subcode data read
14	SYCLK	not connected	Frame lock status output. Lock = high
15	EFFK	not connected	EFM frame clock output. Duty = 50%
16	KILLB	not connected	Digital silence mute output. Digital zero = low
17	EST1	not connected	Error monitor output 1
18	EST2	not connected	Error monitor output 2
19	HF	Servo processor → Signal processor	HF signal input
20	TLC	-	Slice level control signal output
21	LPF	-	PLL loop filter
22	Dig.V_{DD}	-	Digital interface power supply
23	DSPS	-	Digital system power supply
24	SBQS	not connected	Interrupt signal to read out subcode Q data. Read = low
25	CRCF	not connected	Subcode Q-channel Cyclic Redundance Check Flag output. CRC o.k.=high level
26	SCAND	not connected	Subcode sync signal detection. Sync = high
27	PWM	Signal processor → Motor driver	Disc motor driving (Pulse Width Modulation) output
28	DVDD2	-	Digital interface power supply 2
29	DVSS2	-	Digital system ground2
30	MCK	µP → Signal processor	µP interface shift Clock input
31	MSD	µP ↔ Signal processor	µP interface Serial Data I/O line
32	MLAB	µP → Signal processor	µP interface Latch clock input (internal 22k pull up resistor)
33	EXP1	→ Signal processor	Versatile input pin (internal 4.7k pull up resistor)
34	EXP2	→ Signal processor	Versatile input pin (internal 4.7k pull up resistor)
35	CGREF	→ Signal processor	Charge-pump for LPF reference current input
36	AMPREF	not connected	Op-amp for LPF reference voltage setting
37	LOUT/DO	Signal processor →	Audio signal output (left channel) / Ext. DAC mode: Audio serial data output
38	LNEG	not connected	Charge pump output (left channel) / Ext. DAC mode: Wordclock output
39	ROUT/DSCK	Signal processor →	Audio signal output (right channel) / Ext. DAC mode: Data shift clock output
40	RNEG/LRCK	Signal processor →	Charge pump output (right channel) / Ext. DAC mode: L/R clock output
41	IREF	-	Current reference
42	Anal. V_{DD}	-	Analog System power supply

SERVICE TESTPROGRAM



servtest EVA, 021097

3-10

CD ERROR codes

Error number	*Error description*	*Error type*
E0	**Focus Error** Triggered when the focus is lost for more than 250ms during playing the CD.	W
E2	**Slide-in error** Generated when the inner-switch did not close within approx. 4s when the pick up is moved inside. Inner-switch or slide motor problems.	W
E3	**Slide-out error** Generated when the inner-switch did not open within approx. 250ms when the pick up is moved from the inner position outside. Inner-switch or slide motor problems.	W
E5	**Jump error.** Triggered when the servo processor counts too less tracks in a defined time during JUMPS. This can be caused by a disturbed HF-signal (the tracks cannot be recognized exactly), slide motor problems, track servo problems or scratched discs.	W
E6	**Subcode Error** No valid subcode for 300ms during *PLAY*.	W
E7	**PLL lock error** When the PLL did not lock after 10 retries then this warning message is generated and the servo is stopped and restarted (as if the user would have pressed *STOP* and then *PLAY* immediately) to recover.	W
F0	**Focus Search Error** Triggered when the focus could not be found within 3s when starting up the CD.	F
F2	**Fatal Subcode Error** No valid subcode for more than 4s during *PLAY*.	F

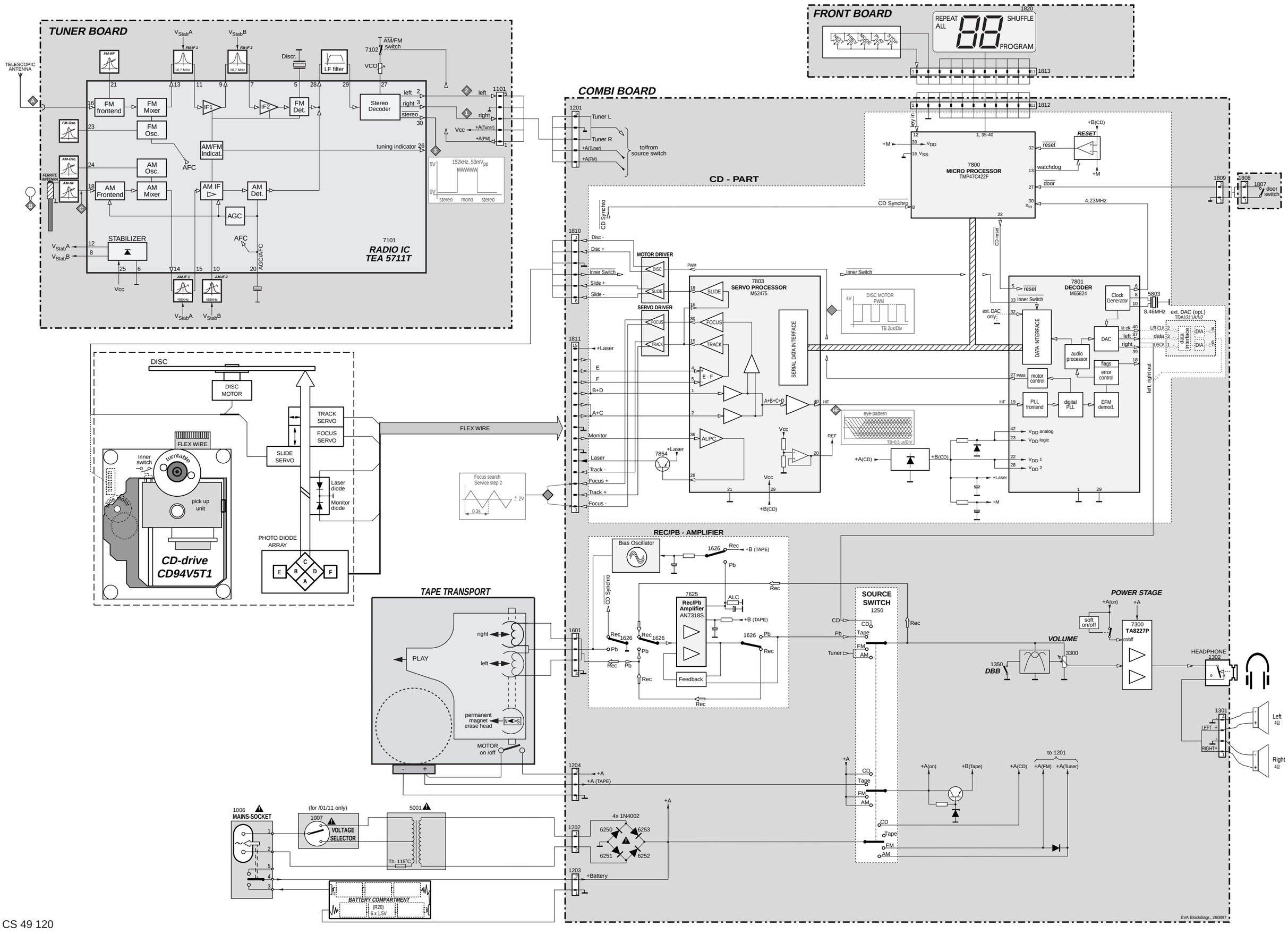
table 1

Error type: W = Warning → set continues operation, message remains on the display until next error occurs or any key is pressed.

F = Fatal Error → set stops operation, message remains on the display. (The set can only be operated again via a *reset*)

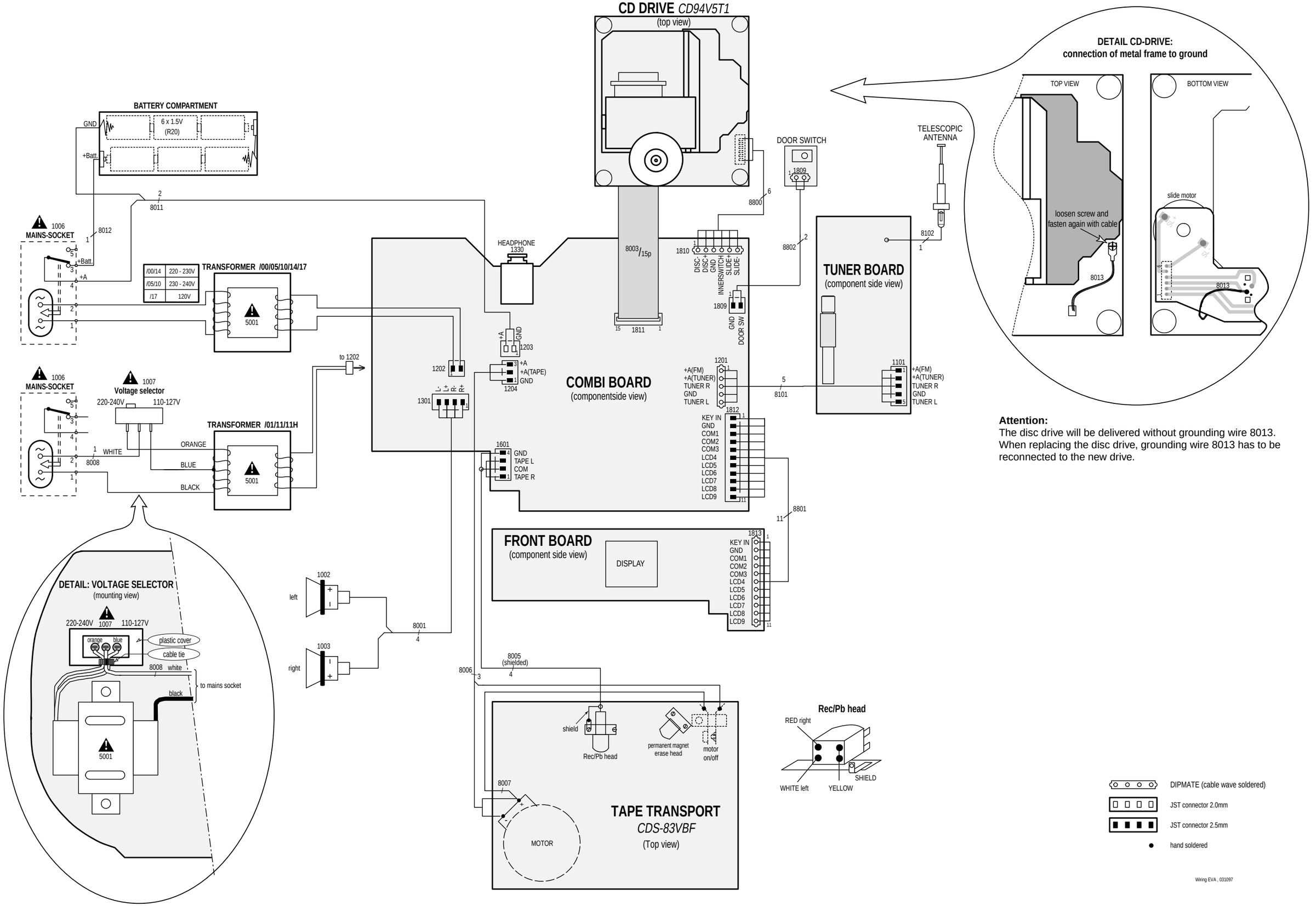
BLOCK DIAGRAM

4-1



5-1

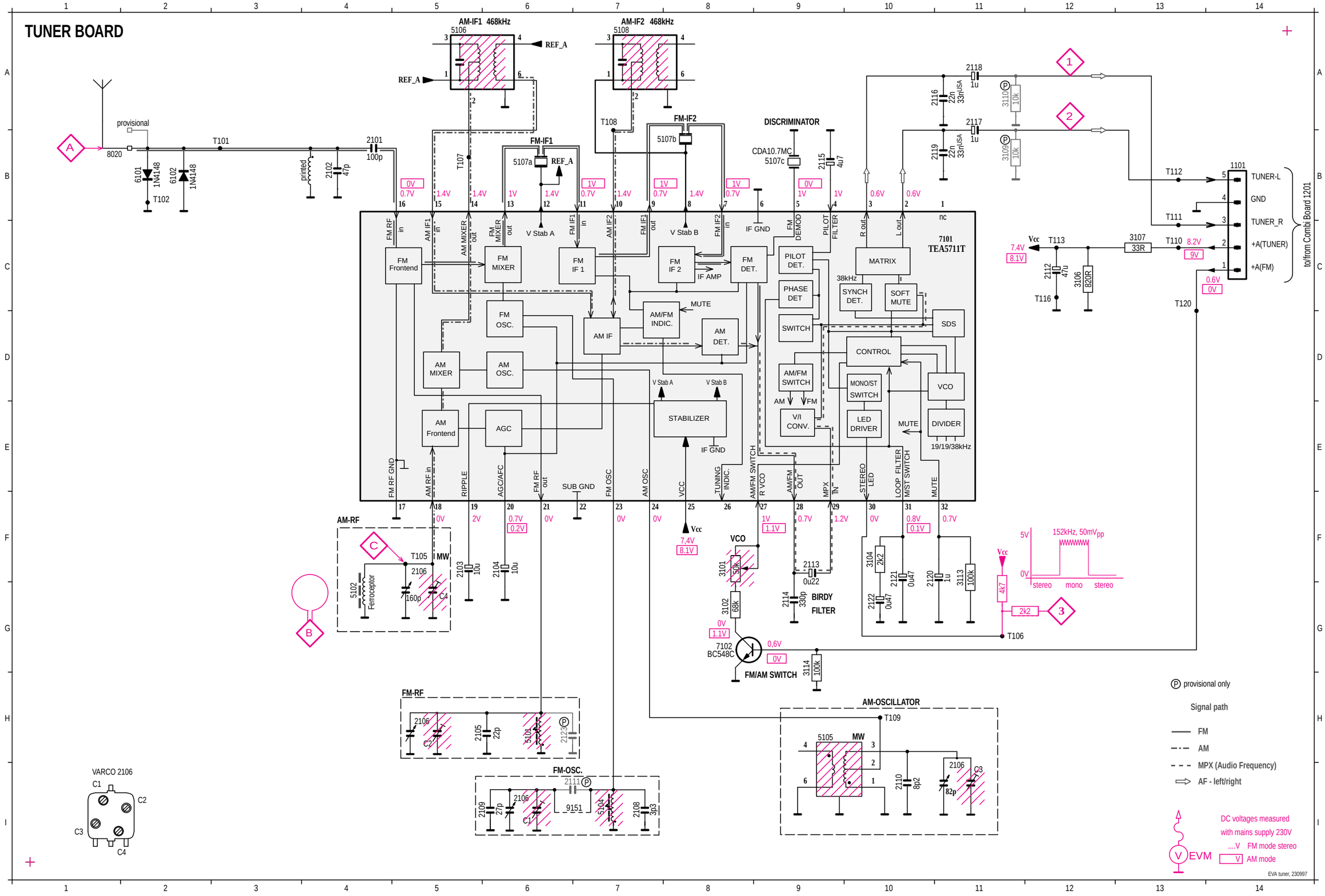
WIRING DIAGRAM



Attention:
The disc drive will be delivered without grounding wire 8013. When replacing the disc drive, grounding wire 8013 has to be reconnected to the new drive.

6-1

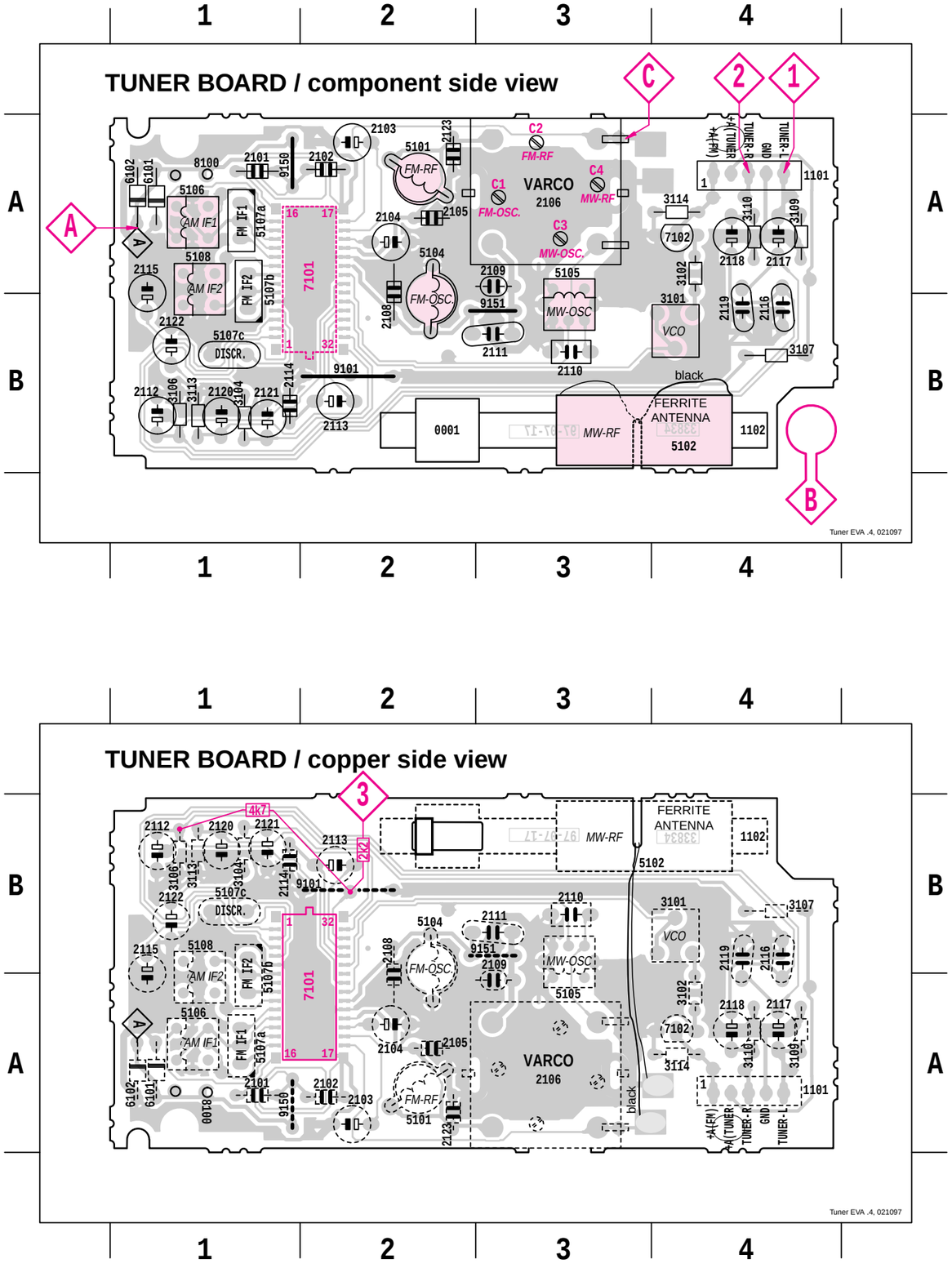
TUNER BOARD



1101 B14
2101 B 4
2102 B 4
2103 F 5
2104 F 6
2105 H 5
2106 I 6
2106 I11
2106 F 5
2106 H 5
2108 I 7
2109 I 6
2110 I10
2111 I 7
2112 C12
2113 F 9
2114 G 9
2115 B 9
2116 A11
2117 A11
2118 A11
2119 B11
2120 F10
2121 F10
2122 G10
2123 H 6
3101 F 8
3102 G 8
3104 F10
3106 C12
3107 C13
3109 B11
3110 A11
3113 F11
3114 G 9
5101 H 6
5102 G 4
5104 I 7
5105 I 9
5106 A 5
5107a B 6
5107b B 8
5107c B 9
5108 A 7
6101 B 2
6102 B 2
7101 C11
7102 G 8
9151 I 6

6-2

0001 B 2 2104 A 2 2111 B 3 2117 A 4 2123 A 2 3109 A 4 5104 B 2 5108 A 1 9101 B 2
1101 A 4 2105 A 2 2112 B 1 2118 A 4 3101 B 4 3110 A 4 5105 B 3 6101 A 1 9150 A 1
1102 B 4 2106 A 3 2113 B 2 2119 B 4 3102 A 4 3113 B 1 5106 A 1 6102 A 1 9151 B 3
2101 A 1 2108 A 2 2114 B 1 2120 B 1 3104 B 1 3114 A 4 5107a A 1 7101 A 2
2102 A 2 2109 A 3 2115 A 1 2121 B 1 3106 B 1 5101 A 2 5107b A 1 7102 A 4
2103 A 2 2110 B 3 2116 B 4 2122 B 1 3107 B 4 5102 B 4 5107c B 1 8100 A 1



TUNER ADJUSTMENT TABLE

Waverange	Input Frequency	Input	Set tuned to	Adjust	Measure on	Scope / Counter
OSCILLATOR						
FM [1] 87,5 - 108 MHz	87,35 MHz 108,25 MHz	A Δf = ±500kHz V_{RF} = 100µV	lower band end upper band end	5104 2106 C1	1 or 2	f_o
MW 525 - 1607 kHz (530 - 1710 kHz) [2]	512 kHz (525 kHz) 1635 kHz (1720 kHz)	C Δf = ±30kHz V_{RF} = 100µV	lower band end upper band end	5105 2106 C3	1 or 2	f_o
FM - RF						
FM 87,5 - 108 MHz	87,5 MHz 108 MHz	A Δf = ±500kHz V_{RF} = 10µV	87,5 MHz 108 MHz	5101 2106 C2	1 or 2	max.
VCO						
FM	98 MHz	A continuous wave V_{RF} = 1 mV	98 MHz	3101	3 (7101 pin 30, 2k2, 4k7, V_{CC})	152 ±1 kHz [3]
AM - IF						
MW	468 kHz connect pin 24 of IC 7101 (AM Osc) with short wire to ground	C Δf = ±15kHz V_{RF} = 10mV	IC 7101 10, 220R, 100nF IC 7101 14, 220R, 100nF see remark [4]	5106 5108	1 or 2	max. f_o symmetric
AM -RF						
MW	560 kHz 1500 kHz	B Δf = ±30kHz V_{RF} as low as possible	560 kHz 1500 kHz	5102 (ferroceptor coil) 2106 C4	1 or 2	max. symmetric

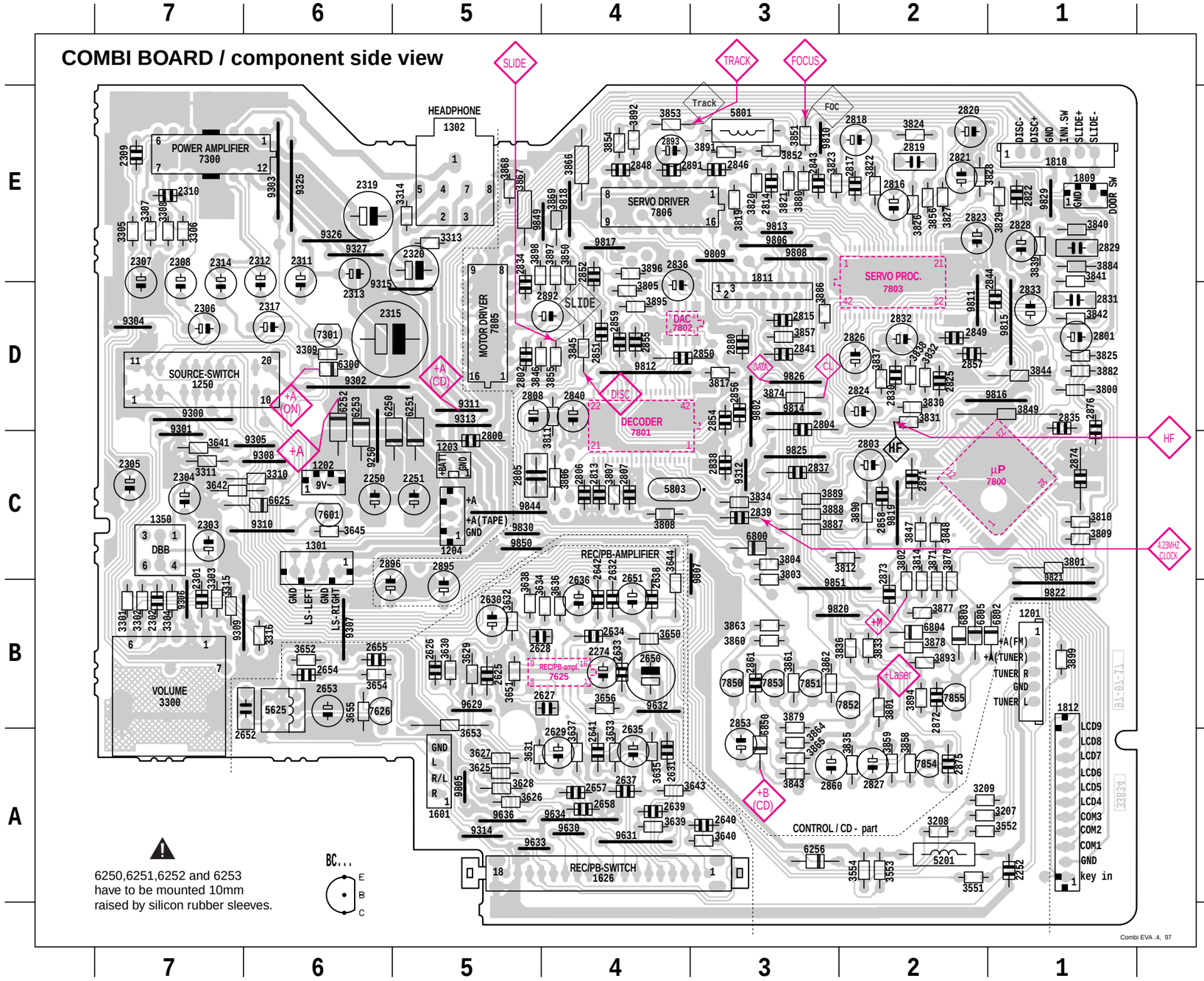
Tuner Adj. EVA, 021097

repeat

[1] Check if capacitor 2109 stands upright before starting adjustments.
[2] for USA /17
[3] If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum).
[4] RC-network serves for damping the IF-filter while adjusting the other one.

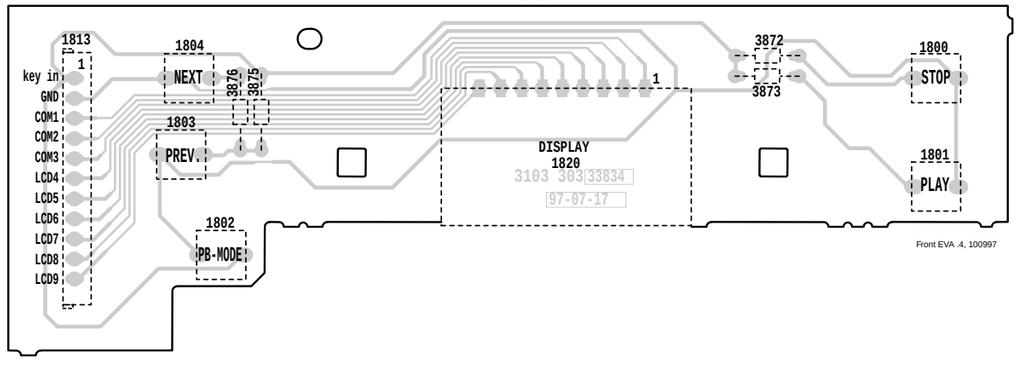
7-1

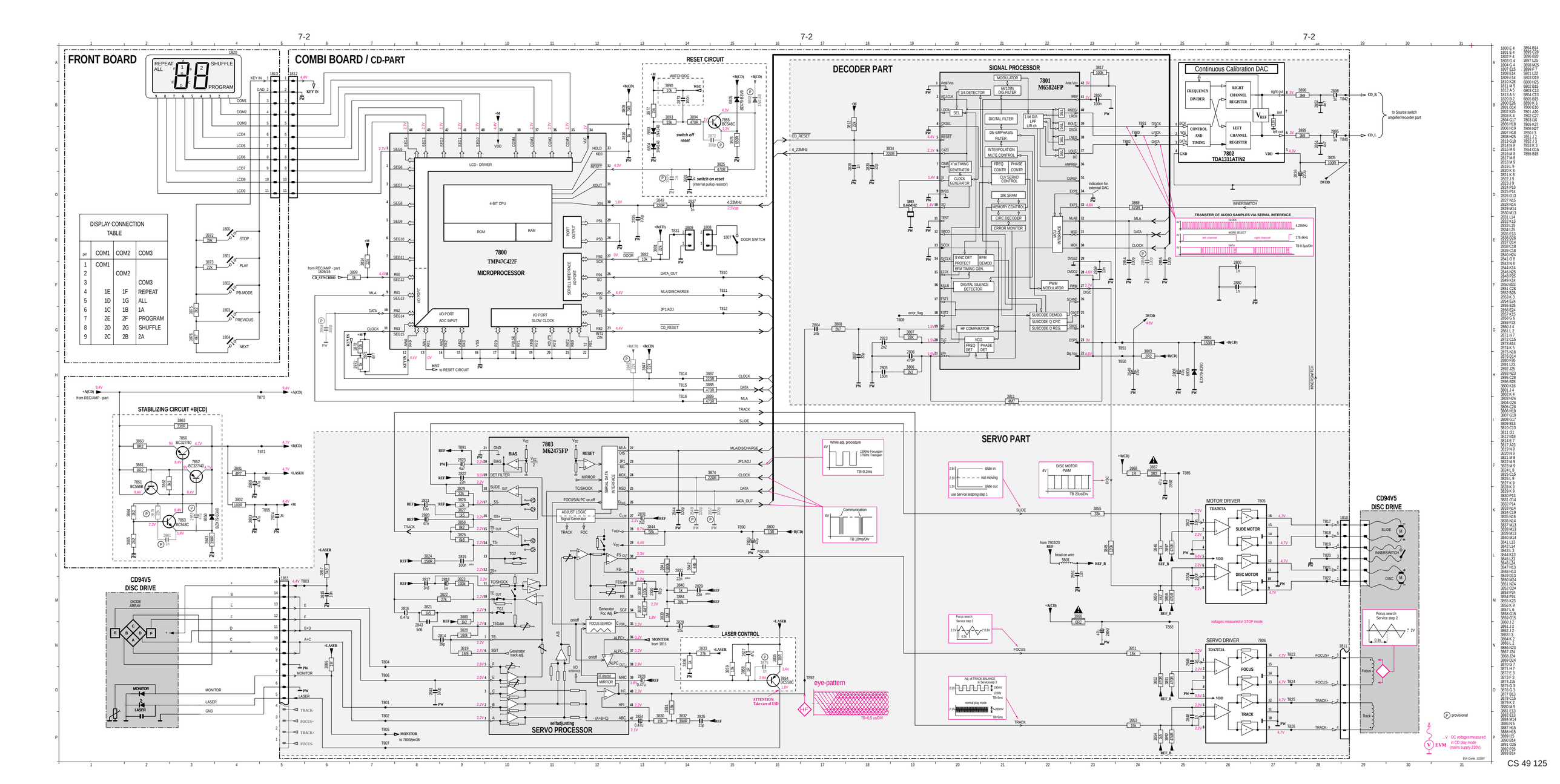
COMBI BOARD / component side view



1201 B 1	2815 D 3	3315 B 7	3843 A 3	7800 C 1
1202 C 6	2816 E 2	3316 B 6	3844 D 1	7801 D 4
1203 C 5	2817 E 2	3551 A 2	3845 D 4	7802 D 4
1204 C 5	2818 E 2	3552 A 2	3846 D 5	7803 D 2
1250 D 7	2819 E 2	3553 A 2	3847 C 2	7805 D 5
1301 C 6	2820 E 2	3554 A 2	3848 C 2	7806 E 4
1302 E 5	2821 E 2	3625 A 5	3849 D 1	7850 B 3
1350 C 7	2822 E 1	3626 A 5	3850 E 4	7851 B 3
1601 A 5	2823 E 2	3627 A 5	3851 E 3	7852 B 2
1626 A 4	2824 D 2	3628 A 5	3852 E 3	7853 B 3
1809 E 1	2825 D 2	3629 B 5	3853 E 4	7854 A 2
1810 E 1	2826 D 2	3630 B 5	3854 E 4	7855 B 2
1811 D 3	2827 A 2	3631 A 5	3855 D 4	9250 C 6
1812 A 1	2828 E 1	3632 B 5	3856 E 2	9300 D 7
2250 C 6	2829 E 1	3633 A 4	3857 D 3	9301 C 7
2251 C 5	2830 D 2	3634 B 4	3858 A 2	9302 D 6
2252 A 1	2831 D 1	3635 A 4	3859 A 2	9303 E 6
2274 B 4	2832 D 2	3636 B 4	3860 B 3	9304 D 7
2301 B 7	2833 D 1	3637 A 4	3861 B 3	9305 C 6
2302 B 7	2834 D 5	3638 B 5	3862 B 3	9306 B 7
2303 C 7	2835 D 1	3639 A 4	3863 B 3	9307 B 6
2304 C 7	2836 D 4	3640 A 3	3864 A 3	9308 C 6
2305 C 7	2837 C 3	3641 C 7	3865 A 3	9309 B 6
2306 D 7	2838 C 3	3642 C 7	3866 E 4	9310 C 6
2307 D 7	2839 C 3	3643 A 4	3867 E 5	9311 D 5
2308 D 7	2840 D 4	3644 B 4	3868 E 5	9312 C 3
2309 E 7	2841 D 3	3645 C 6	3869 E 4	9313 D 5
2310 E 7	2843 E 3	3650 B 4	3870 B 2	9314 A 5
2311 E 6	2844 D 1	3651 B 5	3871 B 2	9315 D 5
2312 E 6	2846 E 3	3652 B 6	3874 D 3	9325 E 6
2313 E 6	2848 E 4	3653 B 5	3877 B 2	9326 E 6
2314 D 7	2849 D 2	3654 B 6	3878 B 2	9327 E 6
2315 D 6	2850 D 4	3655 B 6	3879 B 3	9629 B 5
2317 D 6	2851 D 4	3656 B 4	3880 E 3	9630 A 4
2319 E 6	2852 E 4	3800 D 1	3881 C 1	9631 A 4
2320 E 5	2853 A 3	3801 B 2	3882 D 1	9632 B 4
2625 B 5	2854 D 3	3802 B 2	3884 E 1	9633 A 5
2626 B 5	2855 D 4	3803 B 3	3886 D 3	9634 A 4
2627 B 4	2856 D 3	3804 C 3	3887 C 3	9636 A 5
2628 B 5	2857 D 2	3805 D 4	3888 C 3	9802 D 3
2629 A 4	2858 C 2	3806 C 4	3889 C 3	9805 A 5
2630 B 5	2859 D 4	3807 C 4	3890 C 2	9806 E 3
2631 A 4	2860 A 3	3808 C 4	3891 E 3	9807 C 3
2632 B 4	2861 B 3	3809 C 1	3892 E 4	9808 E 3
2633 B 4	2871 C 2	3810 C 1	3893 B 2	9809 E 3
2634 B 4	2872 B 2	3811 D 4	3894 B 2	9810 E 3
2635 A 4	2873 B 2	3812 C 2	3895 D 4	9811 D 2
2636 B 4	2874 C 1	3814 B 2	3896 E 4	9812 D 4
2637 A 4	2875 A 2	3817 D 3	3897 E 4	9813 E 3
2638 B 4	2876 D 1	3819 E 3	3898 E 5	9814 D 3
2639 A 4	2880 D 3	3820 E 3	3899 B 1	9815 D 1
2640 A 3	2891 E 4	3821 E 3	5201 A 2	9816 D 1
2641 A 4	2892 D 4	3822 E 2	5625 B 6	9817 E 4
2642 B 4	2893 E 4	3823 E 3	5801 E 3	9818 E 4
2650 B 4	2895 B 5	3824 E 2	5803 C 4	9819 C 2
2651 B 4	2896 B 6	3825 D 1	6250 C 5	9820 B 3
2652 B 6	3207 A 2	3826 E 2	6251 C 5	9821 B 1
2653 B 6	3208 A 2	3827 E 2	6252 D 6	9822 B 1
2654 B 6	3209 A 2	3828 E 2	6253 C 6	9825 C 3
2655 B 6	3300 B 7	3829 E 1	6256 A 3	9826 D 3
2657 A 4	3301 B 7	3830 D 2	6300 D 6	9829 E 1
2658 A 4	3302 B 7	3831 D 2	6625 C 6	9830 C 5
2800 C 5	3303 B 7	3832 D 2	6800 C 3	9844 C 5
2801 D 1	3304 B 7	3833 B 2	6802 B 1	9849 E 4
2802 D 5	3305 E 7	3834 C 3	6803 B 2	9850 C 5
2803 C 2	3306 E 7	3835 A 2	6804 B 2	9851 B 3
2804 D 3	3307 E 7	3836 B 2	6805 B 2	
2805 C 5	3308 E 7	3837 D 2	6850 A 3	
2806 C 4	3309 D 6	3838 D 2	7300 E 7	
2807 C 4	3310 C 6	3839 E 1	7301 D 6	
2808 D 5	3311 C 7	3840 E 1	7601 C 6	
2813 C 4	3313 E 5	3841 E 1	7625 B 4	
2814 E 3	3314 E 5	3842 D 1	7626 B 6	

FRONT BOARD / copper side view

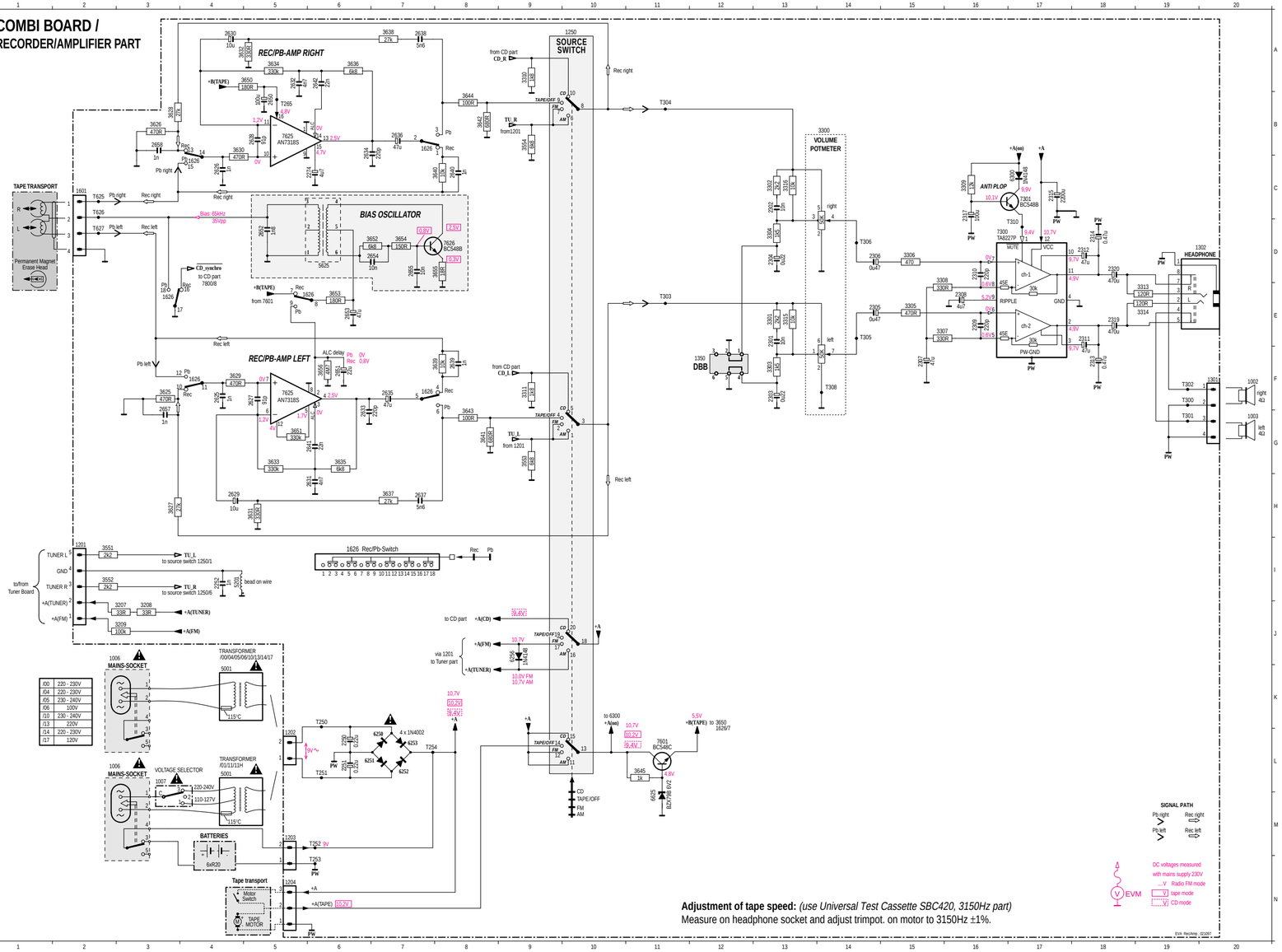




1800 E 4 3894 B14
1801 E 4 3895 C28
1802 F 4 3896 B28
1803 G 4 3897 L25
1804 G 4 3898 M25
1807 E15 3899 F 7
1808 E14 5801 U26
1809 E14 5803 D19
1810 A28 6800 H25
1811 M 5 6802 B15
1812 A 5 6803 C13
1813 A 5 6804 C13
1820 B 2 6805 B15
2800 E26 6850 K 3
2801 D14 7800 E10
2802 K25 7801 A20
2803 K 4 7802 C27
2804 G17 7803 I10
2805 H19 7805 K27
2806 H19 7806 N27
2807 H18 7850 I 3
2808 H25 7851 I 2
2813 G18 7852 J 3
2814 N 9 7853 K 3
2815 M 6 7854 O16
2816 M 8 7855 B15
2817 M 8
2818 M 9
2819 L 9
2820 K 8
2821 K 8
2822 J 9
2823 J 9
2824 P13
2825 P14
2826 O13
2827 N25
2828 N14
2829 M14
2830 M13
2831 L14
2832 K13
2833 L15
2834 L25
2835 E13
2836 D28
2837 D14
2838 C18
2839 C18
2840 H24
2841 O 8
2843 N 8
2844 K14
2846 N25
2848 P25
2849 K14
2850 B23
2851 C28
2852 B28
2853 K 3
2854 E24
2855 E25
2856 E24
2857 K15
2858 G 6
2859 F23
2860 J 4
2861 L 2
2871 H 7
2872 C15
2873 B14
2874 K 5
2875 N16
2876 D14
2880 F26
2891 L23
2892 J25
2893 N23
2895 C28
2896 B28
3800 K16
3801 J 4
3802 K24
3803 H24
3804 N24
3805 C28
3806 H19
3807 G19
3808 G17
3809 B13
3810 C13
3811 G 1
3812 B18
3814 E 7
3817 A23
3818 N 9
3820 N 9
3821 M 9
3822 M 9
3823 M 9
3824 L 8
3825 C15
3826 L 9
3827 K 9
3828 K 9
3829 K 9
3830 P13
3831 O14
3832 P14
3833 N14
3834 C18
3835 N16
3836 N24
3837 M13
3838 M13
3839 M13
3840 M14
3841 L13
3842 L14
3843 L 3
3844 K13
3845 L23
3846 L24
3847 H13
3848 H13
3849 D13
3850 M24
3851 N24
3852 O24
3853 P24
3854 P24
3855 K23
3856 K 9
3857 L 6
3858 O15
3859 O15
3860 J 2
3861 J 2
3862 J 2
3863 I 3
3864 K 2
3865 L 2
3866 N23
3867 J24
3868 J24
3869 D24
3870 G 7
3871 H 7
3872 E 3
3873 F 3
3874 J15
3875 G 3
3876 G 3
3877 B13
3878 C15
3879 K 2
3880 M 9
3881 E13
3882 E13
3884 M14
3886 N 6
3887 H15
3888 H15
3889 I15
3890 B14
3891 O25
3892 P25
3893 B14

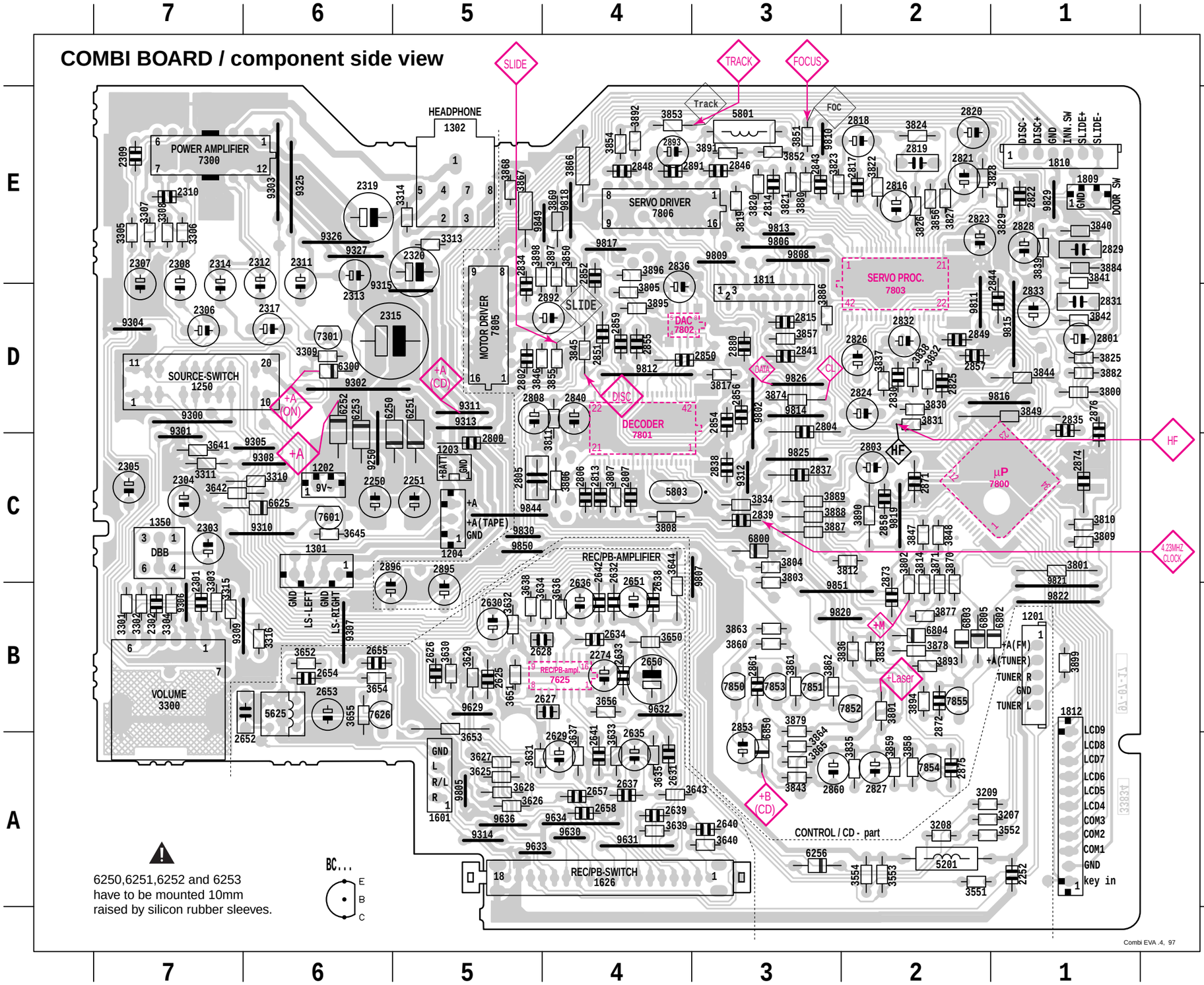
7-3
7-3

COMBI BOARD /
RECORDER/AMPLIFIER PART



7-4

COMBI BOARD / component side view



1201 B 1	2815 D 3	3315 B 7	3843 A 3	7800 C 1
1202 C 6	2816 E 2	3316 B 6	3844 D 1	7801 D 4
1203 C 5	2817 E 2	3551 A 2	3845 D 4	7802 D 4
1204 C 5	2818 E 2	3552 A 2	3846 D 5	7803 D 2
1250 D 7	2819 E 2	3553 A 2	3847 C 2	7805 D 5
1301 C 6	2820 E 2	3554 A 2	3848 C 2	7806 E 4
1302 E 5	2821 E 2	3625 A 5	3849 D 1	7850 B 3
1350 C 7	2822 E 1	3626 A 5	3850 E 4	7851 B 3
1601 A 5	2823 E 2	3627 A 5	3851 E 3	7852 B 2
1626 A 4	2824 D 2	3628 A 5	3852 E 3	7853 B 3
1809 E 1	2825 D 2	3629 B 5	3853 E 4	7854 A 2
1810 E 1	2826 D 2	3630 B 5	3854 E 4	7855 B 2
1811 D 3	2827 A 2	3631 A 5	3855 D 4	9250 C 6
1812 A 1	2828 E 1	3632 B 5	3856 E 2	9300 D 7
2250 C 6	2829 E 1	3633 A 4	3857 D 3	9301 C 7
2251 C 5	2830 D 2	3634 B 4	3858 A 2	9302 D 6
2252 A 1	2831 D 1	3635 A 4	3859 A 2	9303 E 6
2274 B 4	2832 D 2	3636 B 4	3860 B 3	9304 D 7
2301 B 7	2833 D 1	3637 A 4	3861 B 3	9305 C 6
2302 B 7	2834 D 5	3638 B 5	3862 B 3	9306 B 7
2303 C 7	2835 D 1	3639 A 4	3863 B 3	9307 B 6
2304 C 7	2836 D 4	3640 A 3	3864 A 3	9308 C 6
2305 C 7	2837 C 3	3641 C 7	3865 A 3	9309 B 6
2306 D 7	2838 C 3	3642 C 7	3866 E 4	9310 C 6
2307 D 7	2839 C 3	3643 A 4	3867 E 5	9311 D 5
2308 D 7	2840 D 4	3644 B 4	3868 E 5	9312 C 3
2309 E 7	2841 D 3	3645 C 6	3869 E 4	9313 D 5
2310 E 7	2843 E 3	3650 B 4	3870 B 2	9314 A 5
2311 E 6	2844 D 1	3651 B 5	3871 B 2	9315 D 5
2312 E 6	2846 E 3	3652 B 6	3874 D 3	9325 E 6
2313 E 6	2848 E 4	3653 B 5	3877 B 2	9326 E 6
2314 D 7	2849 D 2	3654 B 6	3878 B 2	9327 E 6
2315 D 6	2850 D 4	3655 B 6	3879 B 3	9629 B 5
2317 D 6	2851 D 4	3656 B 4	3880 E 3	9630 A 4
2319 E 6	2852 E 4	3800 D 1	3881 C 1	9631 A 4
2320 E 5	2853 A 3	3801 B 2	3882 D 1	9632 B 4
2625 B 5	2854 D 3	3802 B 2	3884 E 1	9633 A 5
2626 B 5	2855 D 4	3803 B 3	3886 D 3	9634 A 4
2627 B 4	2856 D 3	3804 C 3	3887 C 3	9636 A 5
2628 B 5	2857 D 2	3805 D 4	3888 C 3	9802 D 3
2629 A 4	2858 C 2	3806 C 4	3889 C 3	9805 A 5
2630 B 5	2859 D 4	3807 C 4	3890 C 2	9806 E 3
2631 A 4	2860 A 3	3808 C 4	3891 E 3	9807 C 3
2632 B 4	2861 B 3	3809 C 1	3892 E 4	9808 E 3
2633 B 4	2871 C 2	3810 C 1	3893 B 2	9809 E 3
2634 B 4	2872 B 2	3811 D 4	3894 B 2	9810 E 3
2635 A 4	2873 B 2	3812 C 2	3895 D 4	9811 D 2
2636 B 4	2874 C 1	3814 B 2	3896 E 4	9812 D 4
2637 A 4	2875 A 2	3817 D 3	3897 E 4	9813 E 3
2638 B 4	2876 D 1	3819 E 3	3898 E 5	9814 D 3
2639 A 4	2880 D 3	3820 E 3	3899 B 1	9815 D 1
2640 A 3	2891 E 4	3821 E 3	5201 A 2	9816 D 1
2641 A 4	2892 D 4	3822 E 2	5625 B 6	9817 E 4
2642 B 4	2893 E 4	3823 E 3	5801 E 3	9818 E 4
2650 B 4	2895 B 5	3824 E 2	5803 C 4	9819 C 2
2651 B 4	2896 B 6	3825 D 1	6250 C 5	9820 B 3
2652 B 6	3207 A 2	3826 E 2	6251 C 5	9821 B 1
2653 B 6	3208 A 2	3827 E 2	6252 D 6	9822 B 1
2654 B 6	3209 A 2	3828 E 2	6253 C 6	9825 C 3
2655 B 6	3300 B 7	3829 E 1	6256 A 3	9826 D 3
2657 A 4	3301 B 7	3830 D 2	6300 D 6	9829 E 1
2658 A 4	3302 B 7	3831 D 2	6625 C 6	9830 C 5
2800 C 5	3303 B 7	3832 D 2	6800 C 3	9844 C 5
2801 D 1	3304 B 7	3833 B 2	6802 B 1	9849 E 4
2802 D 5	3305 E 7	3834 C 3	6803 B 2	9850 C 5
2803 C 2	3306 E 7	3835 A 2	6804 B 2	9851 B 3
2804 D 3	3307 E 7	3836 B 2	6805 B 2	
2805 C 5	3308 E 7	3837 D 2	6850 A 3	
2806 C 4	3309 D 6	3838 D 2	7300 E 7	
2807 C 4	3310 C 6	3839 E 1	7301 D 6	
2808 D 5	3311 C 7	3840 E 1	7601 C 6	
2813 C 4	3313 E 5	3841 E 1	7625 B 4	
2814 E 3	3314 E 5	3842 D 1	7626 B 6	

ELECTRICAL PARTSLIST

MECHANICAL PARTS

0001	4822 256 90463	HOLDER FERRITE BAR

MISCELLANEOUS

1250	4822 277 11739	SWITCH SLIDE, MODE
1302	4822 267 31468	SOCKET HEADPHONE 3,5mm Jack
1350	4822 276 12648	SWITCH PUSH, DBB
1626	4822 277 11504	SWITCH SLIDE, REC/PB
1800	4822 276 13114	TACT SWITCH
1801	4822 276 13114	TACT SWITCH
1802	4822 276 13114	TACT SWITCH
1803	4822 276 13114	TACT SWITCH
1804	4822 276 13114	TACT SWITCH
1807	4822 276 12889	DOOR SWITCH
1820	4822 135 00151	LCD

CAPACITORS

2101	4822 122 33195	100pF	10%	50V	
2102	4822 122 33848	47pF	5%	50V	
2103	4822 124 40248	10µF	20%	63V	
2104	4822 124 40248	10µF	20%	63V	
2105	4822 122 33191	22pF	5%	50V	
2106	4822 125 50681	VARCO TUNING			
2108	4822 126 13508	3p3	10%	50V	
2109	4822 126 13674	27pF	5%	N330	
2110	4822 126 12229	8,2pF	N750	50V	
2112	4822 124 41397	47µF	20%	25V	
2113	4822 126 13581	0,22µF	20%	50V	
2114	4822 126 12787	330pF	10%	50V	
2115	4822 124 40246	4,7µF	20%	63V	
2116	4822 121 43144	22nF	10%	50V	not for USA
2116	4822 121 43145	33nF	10%	50V	only for USA
2117	4822 124 40242	1µF	20%	63V	
2118	4822 124 40242	1µF	20%	63V	
2119	4822 121 43144	22nF	10%	50V	not for USA
2119	4822 121 43145	33nF	10%	50V	only for USA
2120	4822 124 40242	1µF	20%	63V	
2121	4822 124 40239	0,47µF	20%	63V	
2122	4822 124 40239	0,47µF	20%	63V	
2250	4822 124 40746	0,22µF	20%	63V	
2251	4822 124 40746	0,22µF	20%	63V	
2252	4822 122 33197	1nF	10%	50V	
2274	4822 124 40246	4,7µF	20%	63V	
2301	4822 121 51387	10nF	20%	16V	
2302	4822 121 51387	10nF	20%	16V	
2303	4822 124 40746	0,22µF	20%	63V	
2304	4822 124 40746	0,22µF	20%	63V	
2305	4822 124 41407	0,47µF	20%	63V	
2306	4822 124 41407	0,47µF	20%	63V	
2307	4822 124 40433	47µF	20%	25V	
2308	4822 124 40246	4,7µF	20%	63V	
2309	4822 122 10466	220pF	10%	50V	
2310	4822 122 10466	220pF	10%	50V	
2311	4822 124 40433	47µF	20%	25V	
2312	4822 124 40433	47µF	20%	25V	
2313	4822 124 41407	0,47µF	20%	63V	
2314	4822 124 41407	0,47µF	20%	63V	
2315	4822 123 14025	2200µF	20%	16V	
2317	4822 124 81029	100µF	20%	25V	
2319	4822 124 41997	470µF	20%	10V	
2320	4822 124 41997	470µF	20%	10V	
2625	4822 122 33197	1nF	10%	50V	
2626	4822 122 33197	1nF	10%	50V	

CAPACITORS

2627	4822 126 13507	91pF	5%	50V
2628	4822 126 13507	91pF	5%	50V
2629	4822 124 41579	10µF	20%	50V
2630	4822 124 41579	10µF	20%	50V
2631	4822 126 11714	4,7nF	20%	16V
2632	4822 126 11714	4,7nF	20%	16V
2633	4822 122 10466	220pF	10%	50V
2634	4822 122 10466	220pF	10%	50V
2635	4822 124 40433	47µF	20%	25V
2636	4822 124 40433	47µF	20%	25V
2637	4822 126 13098	5,6nF	20%	16V
2638	4822 126 13098	5,6nF	20%	16V
2639	4822 122 33197	1nF	10%	50V
2640	4822 122 33197	1nF	10%	50V
2641	4822 126 11585	22nF	20%	50V
2642	4822 126 11585	22nF	20%	50V
2650	4822 124 41584	100µF	20%	10V
2651	4822 124 41596	22µF	20%	50V
2652	4822 121 43054	1,8nF	10%	50V
2653	4822 124 40433	47µF	20%	25V
2654	4822 121 51387	10nF	20%	16V
2655	4822 121 51387	10nF	20%	16V
2657	4822 122 33197	1nF	10%	50V
2658	4822 122 33197	1nF	10%	50V
2800	4822 122 33197	1nF	10%	50V
2801	4822 124 40242	1µF	20%	63V
2802	4822 121 51387	10nF	20%	16V
2803	4822 124 40433	47µF	20%	25V
2804	4822 126 12878	1,5nF	10%	16V
2805	4822 121 41854	150nF	10%	63V
2806	4822 122 33519	470pF	10%	50V
2807	4822 122 33191	22pF	5%	50V
2808	4822 124 40433	47µF	20%	25V
2813	4822 126 12339	2,2nF	10%	16V
2814	4822 126 13677	39pF	5%	50V
2815	4822 121 51387	10nF	20%	16V
2816	4822 124 41407	0,47µF	20%	63V
2817	4822 122 10577	3,3nF	10%	16V
2818	4822 124 40242	1µF	20%	63V
2819	5322 121 42386	100nF	5%	63V
2820	4822 121 43526	47nF	5%	100V
2821	4822 124 41579	10µF	20%	50V
2822	4822 126 11585	22nF	20%	50V
2823	4822 124 40246	4,7µF	20%	63V
2824	4822 124 41407	0,47µF	20%	63V
2825	4822 122 10462	15pF	5%	50V
2826	4822 124 41407	0,47µF	20%	63V
2827	4822 124 40433	47µF	20%	25V
2828	4822 124 41579	10µF	20%	50V
2829	5322 121 42489	33nF	5%	100V
2830	4822 122 10319	82pF	5%	50V
2831	4822 121 41856	22nF	5%	250V
2832	4822 124 41576	2,2µF	20%	50V
2833	4822 124 40433	47µF	20%	25V
2834	4822 126 12882	100nF	20%	50V
2835	4822 122 33195	100pF	10%	50V
2836	4822 124 12068	220µF	20%	10V
2837	4822 122 33197	1nF	10%	50V
2838	4822 122 33197	1nF	10%	50V
2839	4822 122 33191	22pF	5%	50V
2840	4822 124 40433	47µF	20%	25V
2841	4822 122 33195	100pF	10%	50V
2843	4822 126 13098	5,6nF	20%	16V

ELECTRICAL PARTSLIST

CAPACITORS

2844	4822 122 33195	100pF	10%	50V
2846	4822 122 33197	1nF	10%	50V
2848	4822 122 33197	1nF	10%	50V
2850	4822 126 12882	100nF	20%	50V
2851	4822 126 11714	4,7nF	20%	
2852	4822 126 11714	4,7nF	20%	
2854	4822 122 33195	100pF	10%	50V
2855	4822 122 33195	100pF	10%	50V
2856	4822 122 33195	100pF	10%	50V
2859	4822 121 51387	10nF	20%	16V
2860	4822 124 40433	47µF	20%	25V
2871	4822 126 11714	4,7nF	20%	
2873	4822 126 12882	100nF	20%	50V
2874	4822 122 33197	1nF	10%	50V
2880	4822 122 33197	1nF	10%	50V
2891	4822 121 51387	10nF	20%	16V
2892	4822 124 40433	47µF	20%	25V
2893	4822 124 40433	47µF	20%	25V
2895	4822 124 40242	1µF	20%	63V
2896	4822 124 40242	1µF	20%	63V

RESISTORS

3101	4822 100 20167	50kΩ TRIMPOT. LIN.		
3102	4822 116 52297	68kΩ	5%	0,5W
3104	4822 116 52256	2,2kΩ	5%	0,16W
3106	4822 116 52231	820Ω	5%	0,5W
3107	4822 116 52191	33Ω	5%	0,5W
3113	4822 116 52234	100kΩ	5%	0,5W
3114	4822 116 52234	100kΩ	5%	0,5W
3207	4822 116 52191	33Ω	5%	0,5W
3208	4822 116 52191	33Ω	5%	0,5W
3209	4822 116 52234	100kΩ	5%	0,5W
3300	4822 101 11826	2x50kΩ LIN., VOLUME POTMETER		
3301	4822 116 52256	2,2kΩ	5%	0,16W
3302	4822 116 52256	2,2kΩ	5%	0,16W
3303	4822 116 52243	1,5kΩ	5%	0,16W
3304	4822 116 52243	1,5kΩ	5%	0,16W
3305	4822 116 83883	470Ω	5%	0,16W
3306	4822 116 83883	470Ω	5%	0,16W
3307	4822 116 52219	330Ω	5%	0,5W
3308	4822 116 52219	330Ω	5%	0,5W
3309	4822 116 52238	12kΩ	5%	0,5W
3310	4822 116 52249	1,8kΩ	5%	0,16W
3311	4822 116 52249	1,8kΩ	5%	0,16W
3313	4822 116 52206	120Ω	5%	0,5W
3314	4822 116 52206	120Ω	5%	0,5W
3315	4822 116 83864	10kΩ	5%	0,5W
3316	4822 116 83864	10kΩ	5%	0,5W
3551	4822 116 52256	2,2kΩ	5%	0,16W
3552	4822 116 52256	2,2kΩ	5%	0,16W
3553	4822 116 83961	6,8kΩ	5%	0,16W
3554	4822 116 83961	6,8kΩ	5%	0,16W
3625	4822 116 83883	470Ω	5%	0,16W
3626	4822 116 83883	470Ω	5%	0,16W
3627	4822 116 52264	27kΩ	5%	0,5W
3628	4822 116 52264	27kΩ	5%	0,5W
3629	4822 116 83883	470Ω	5%	0,16W
3630	4822 116 83883	470Ω	5%	0,16W
3631	4822 116 52219	330Ω	5%	0,5W
3632	4822 116 52219	330Ω	5%	0,5W
3633	4822 116 52272	330kΩ	5%	0,5W
3634	4822 116 52272	330kΩ	5%	0,5W
3635	4822 116 83961	6,8kΩ	5%	0,16W
3636	4822 116 83961	6,8kΩ	5%	0,16W

RESISTORS

3637	4822 116 52264	27kΩ	5%	0,5W
3638	4822 116 52264	27kΩ	5%	0,5W
3639	4822 116 83864	10kΩ	5%	0,5W
3640	4822 116 83864	10kΩ	5%	0,5W
3641	4822 116 52228	680Ω	5%	0,5W
3642	4822 116 52228	680Ω	5%	0,5W
3643	4822 116 52175	100Ω	5%	0,5W
3644	4822 116 52175	100Ω	5%	0,5W
3645	4822 050 11002	1kΩ	5%	0,2W
3650	4822 116 52213	180Ω	5%	0,5W
3651	4822 116 52272	330kΩ	5%	0,5W
3652	4822 116 83961	6,8kΩ	5%	0,16W
3653	4822 116 52213	180Ω	5%	0,5W
3654	4822 116 83868	150Ω	5%	0,5W
3655	4822 116 52184	18Ω	5%	0,5W
3656	4822 111 30893	4,7MΩ	5%	0,2W
3800	4822 116 52176	10Ω	5%	0,5W
3801	4822 050 24708	4,7Ω	1%	0,6W
3802	4822 116 52175	100Ω	5%	0,5W
3803	4822 116 81154	2,2Ω	5%	0,5W
3804	4822 116 83868	150Ω	5%	0,5W
3805	4822 116 52175	100Ω	5%	0,5W
3806	4822 116 52256	2,2kΩ	5%	0,16W
3807	4822 116 52271	33kΩ	5%	0,16W
3808	4822 116 52263	2,7kΩ	5%	0,5W
3809	4822 116 52276	3,9kΩ	5%	0,5W
3810	4822 050 11002	1kΩ	5%	0,2W
3811	4822 111 30893	4,7MΩ	5%	0,2W
3812	4822 116 52257	22kΩ	5%	0,5W
3814	4822 116 52257	22kΩ	5%	0,5W
3817	4822 116 52234	100kΩ	5%	0,5W
3819	4822 117 11825	1,5MΩ	5%	0,4W
3820	4822 116 52252	180kΩ	5%	0,5W
3821	4822 116 52243	1,5kΩ	5%	0,16W
3822	4822 116 52264	27kΩ	5%	0,5W
3823	4822 116 52234	100kΩ	5%	0,5W
3824	4822 116 83868	150Ω	5%	0,5W
3825	4822 116 83883	470Ω	5%	0,16W
3826	4822 116 83961	6,8kΩ	5%	0,16W
3827	4822 116 52243	1,5kΩ	5%	0,16W
3828	4822 116 52238	12kΩ	5%	0,5W
3829	4822 116 52271	33kΩ	5%	0,16W
3830	4822 116 52244	15kΩ	5%	0,5W
3831	4822 116 52251	18kΩ	5%	0,5W
3832	4822 116 52222	390Ω	5%	0,16W
3833	4822 116 52264	27kΩ	5%	0,5W
3834	4822 116 83872	220Ω	5%	0,5W
3835	4822 116 52184	18Ω	5%	0,5W
3836	4822 050 11002	1kΩ	5%	0,2W
3837	4822 111 30893	4,7MΩ	5%	0,2W
3838	4822 116 52234	100kΩ	5%	0,5W
3839	4822 116 52235	1MΩ	5%	0,5W
3840	4822 050 11002	1kΩ	5%	0,2W
3841	4822 116 52298	680kΩ	5%	0,5W
3842	4822 116 52297	68kΩ	5%	0,5W
3843	4822 116 52222	390Ω	5%	0,16W
3844	4822 116 52291	56kΩ	5%	0,5W
3845	4822 116 52239	120kΩ	5%	0,5W
3846	4822 050 11002	1kΩ	5%	0,2W
3847	4822 116 52257	22kΩ	5%	0,5W
3849	4822 116 83872	220Ω	5%	0,5W
3850	4822 116 52283	4,7kΩ	5%	0,5W
3851	4822 116 52244	15kΩ	5%	0,5W
3852	4822 116 83883	470Ω	5%	0,16W

ELECTRICAL PARTSLIST

RESISTORS

3853	4822 116 52244	15kΩ	5%	0,5W
3854	4822 116 52243	1,5kΩ	5%	0,16W
3855	4822 116 52271	33kΩ	5%	0,16W
3856	4822 116 52303	8,2kΩ	5%	0,5W
3857	4822 116 52269	3,3kΩ	5%	0,5W
3858	4822 116 80176	1Ω	5%	0,5W
3859	4822 116 83864	10kΩ	5%	0,5W
3860	4822 050 18208	8,2Ω	1%	0,4W
3861	4822 050 18208	8,2Ω	1%	0,4W
3862	4822 116 52269	3,3kΩ	5%	0,5W
3863	4822 116 52219	330Ω	5%	0,5W
3864	4822 116 52256	2,2kΩ	5%	0,16W
3865	4822 116 52256	2,2kΩ	5%	0,16W
3866 ⚠	4822 052 10828	8,2Ω	5%	0,3W
3867 ⚠	4822 052 10338	3,3Ω	NFR25	
3868	4822 116 80176	1Ω	5%	0,5W
3869	4822 116 83883	470Ω	5%	0,16W
3870	4822 116 52257	22kΩ	5%	0,5W
3871	4822 050 11002	1kΩ	5%	0,2W
3872	4822 116 83882	39kΩ	5%	0,5W
3873	4822 116 52257	22kΩ	5%	0,5W
3874	4822 116 83872	220Ω	5%	0,5W
3875	4822 116 52256	2,2kΩ	5%	0,16W
3876	4822 116 52283	4,7kΩ	5%	0,5W
3877	4822 116 52244	15kΩ	5%	0,5W
3878	4822 116 52228	680Ω	5%	0,5W
3880	4822 116 52207	1,2kΩ	5%	0,5W
3881	4822 116 52257	22kΩ	5%	0,5W
3882	4822 116 83864	10kΩ	5%	0,5W
3884	4822 116 83882	39kΩ	5%	0,5W
3886	4822 116 52235	1MΩ	5%	0,5W
3887	4822 116 83872	220Ω	5%	0,5W
3888	4822 116 83883	470Ω	5%	0,16W
3889	4822 116 83883	470Ω	5%	0,16W
3890	4822 116 83864	10kΩ	5%	0,5W
3891	4822 116 83883	470Ω	5%	0,16W
3892	4822 116 83883	470Ω	5%	0,16W
3893	4822 116 52271	33kΩ	5%	0,16W
3894	4822 116 83883	470Ω	5%	0,16W
3895	4822 116 52276	3,9kΩ	5%	0,5W
3896	4822 116 52276	3,9kΩ	5%	0,5W
3897	4822 116 83883	470Ω	5%	0,16W
3898	4822 116 83883	470Ω	5%	0,16W
3899	4822 050 11002	1kΩ	5%	0,2W

COILS

1102	4822 526 10176	FERRITE BAR 5X13X55MM
5101	4822 157 70513	RF COIL 3,5 TURNS
5102	4822 157 70731	COIL, FERR. ANT. (w/o FERRITE BAR)
5104	4822 156 30947	RF COIL 1,5 TURNS
5105	4822 157 71145	COIL VAR., MW-OSC.
5106	4822 157 70499	AM-IF FILTER, 468kHz
5107	4822 242 81154	FILTER KIT, FM-IF
5108	4822 156 11146	AM-IF FILTER, 468kHz
5201	4822 526 10494	FERRITE BEAD
5625	4822 157 10371	BIAS OSC. COIL VAR. 100kHz
5801	4822 526 10494	FERRITE BEAD
5803	4822 242 73557	CERAMIC RES. 8,46MHz

DIODES

6101	4822 130 30621	1N4148
6102	4822 130 30621	1N4148
6250 ⚠	4822 130 31878	1N4003G
6251 ⚠	4822 130 31878	1N4003G

DIODES

6252 ⚠	4822 130 31878	1N4003G
6253 ⚠	4822 130 31878	1N4003G
6256	4822 130 30621	1N4148
6300	4822 130 30621	1N4148
6625	4822 130 34167	BZX79-B6V2
6800	4822 130 31881	BZX79-B3V0
6803	4822 130 30621	1N4148
6804	4822 130 30621	1N4148
6805	4822 130 31981	BZX79-C3V9
6850	4822 130 31881	BZX79-B3V0

TRANSISTORS

7102	4822 130 44196	BC548C
7301	4822 130 40937	BC548B
7601	4822 130 44196	BC548C
7626	4822 130 40937	BC548B
7850	4822 130 41327	BC327-40
7851	4822 130 44197	BC558B
7852	4822 130 41327	BC327-40
7853	4822 130 44196	BC548C
7854	5322 130 60068	BC558C
7855	4822 130 44196	BC548C

INTEGRATED CIRCUITS

7101 ©	4822 209 32746	TEA5711T/N2, RADIO IC
7300	4822 209 31544	TA8227P, POWER AMPLIFIER IC
7625 ©	4822 209 32918	AN7318S, Rec/Pb-AMPLIFIER IC
7800 ©	4822 209 15932	TMP47C422F-AZ1010.1, µ-PROC.
7801 ©	4822 209 15952	M65824FP, SIGNAL PROCESSOR IC
7802 ©	4822 209 32196	TDA1311AT/N2, DAC
7803 ©	4822 209 90496	M62475FP, SERVO PROCESSOR IC
7805	4822 209 32852	TDA7073A/N2, MOTOR DRIVER
7806	4822 209 32852	TDA7073A/N2, SERVO DRIVER